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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,159	03/26/2004	John Stilianos Agapiou	GP-303796 1985	
75	90 11/03/2005		EXAMINER	
General Motors Corporation			ROSS, DANA	
Legal Staff Mail Code 482-	C23-B21		ART UNIT	PAPER NUMBER
P.O. Box 300			3722	
Detroit, MI 48265-3000			DATE MAILED: 11/03/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/811,159	AGAPIOU ET AL.		
Office Action Summary	Examiner	Art Unit		
	Dana Ross	3722		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE!	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 26 M	larch 2004.			
,— ,	action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is				
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.		
Disposition of Claims				
4) ☐ Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.			
Application Papers				
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 26 March 2004 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Example 2015.	a)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. Sec tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	is have been received. Is have been received in Applicati Inity documents have been receive In (PCT Rule 17.2(a)).	ion No ed in this National Stage		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 3/26/04.	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:			
Paper No(S)/Wall Date <u>3/20/04</u> .				

Application/Control Number: 10/811,159

Art Unit: 3722

### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2, 7 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear from the disclosure what Applicant considers to be "vinyl rubber" material.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,109,842 (Cook, hereafter '842).

'842 teaches a standard and V-flanged tapered tool holder 10 with dampening device 38 fitted over the tool holder body between an angular flange surface and the tapered shank (see figure 2, col. 4, lines 24-28, for example); the damping spacer being a ring made of elastic material including either a fibrous material or an elastomeric material "such as rubber" (see col. 4, lines 59-64).

It is noted that '842 discloses the use of an elastomeric material with specific mention of rubber. Examiner further notes that it is well known in the art that polyurethane is used as an elastomer.

In the alternative, regarding claims 2, 7 and 12, in the event Applicant does not agree that the elastomeric rubber material of '842 includes the use of "vinyl rubber", Applicant is referred to the below 35 USC 103 rejection.

In the alternative, regarding claims 3, 8 and 13, in the event Applicant does not agree that the elastomeric material of '842 includes the use of polyurethane, Applicant is referred to the below 35 USC 103 rejection.

5. Claims 1, 2, 5, 6, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,382,888 (Cook, hereafter '888).

'888 teaches a tapered tool holder 14 with dampening device 28 fitted over the tool holder body between an angular flange surface and the tapered shank and the damping device 36 made of natural or synthetic rubber (see figure 2, col. 3, lines 21-30, for example).

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2, 3, 7, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over '842 in view of US Pat. No. 3,864,181 (Wolinski et al., hereafter '181).
  - '842 teaches all aspects of the above claims 1, 5 and 10.

'842 teaches the use of elastomeric material for the damping device 38.

'842 does not expressly disclose the use of polyurethane material or vinyl rubber.

'181 teaches it is well know to use any natural or synthetic thermoplastic polymer, specifically polyurethanes (col. 4, lines 1-29) or vinyl mixtures (col 3, lines 59-62, for example) or rubber mixtures (col. 4, lines 4-6, for example) for shock absorption, including the shock absorption in gaskets. It is noted that both vinyl and rubber are polymers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the generic elastomeric or rubber dampening device as taught by '842 to include the specific polyurethanes and vinyl and rubber material as taught by '181 for the purpose of absorbing mechanical, electrical, thermal and acoustical energy (see '181 col. 1, lines 25-30, for example) therefore ensuring more precision during the machining process.

8. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over '888 in view of US Pat. No. 3,864,181 (Wolinski et al., hereafter '181).

'888 teaches all aspects of the above claims 1 and 5.

'888 teaches the use of natural or synthetic rubber for the damping device 36.

'888 does not expressly disclose the use of polyurethane material.

'181 teaches it is well know to use any natural or synthetic thermoplastic polymer, specifically polyurethanes (col. 4, lines 1-29) or rubber mixtures (col. 4, lines 4-6, for example) for shock absorption, including the shock absorption in gaskets.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the rubber dampening device as taught by '888 to

include the specific polyurethanes and rubber material as taught by '181 for the purpose of absorbing mechanical, electrical, thermal and acoustical energy (see '181 col. 1, lines 25-30, for example) therefore ensuring more precision during the machining process.

- 9. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over '888 in view of '842.
  - '888 teaches all aspects of the above claims 1 and 5.
  - '888 teaches the use of natural or synthetic rubber for the damping device 36.
  - '888 does not expressly disclose the use of fibrous material.
  - '842 teaches the use of a damping device 38 with fibrous material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the damping device as taught by '888 to include the use of fibrous material as taught by '842for the purpose of preventing slippage between the tool holder and machine tool spindle and therefore ensuring better precision during the machining process.

### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dana Ross Examiner

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dmr